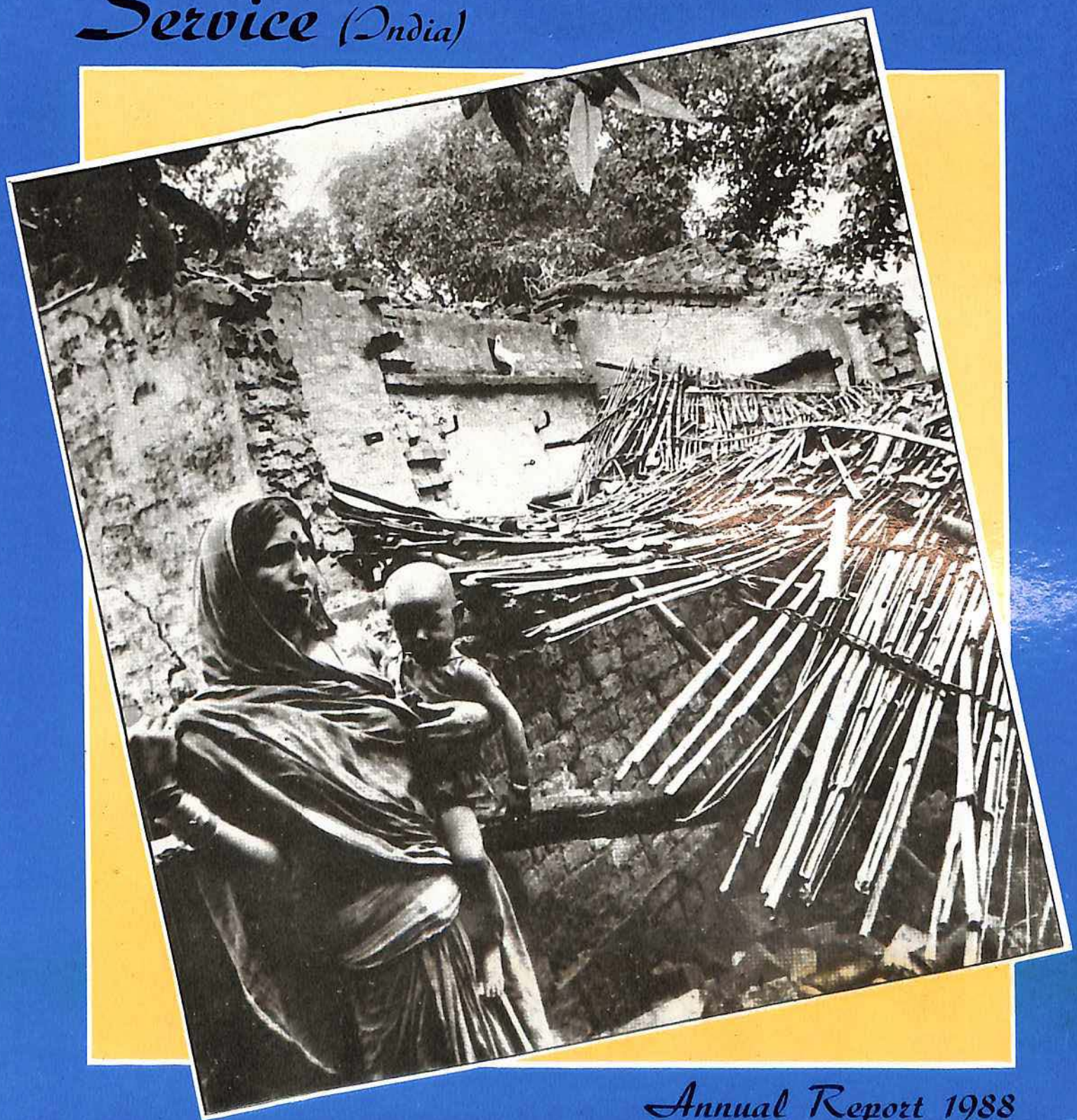
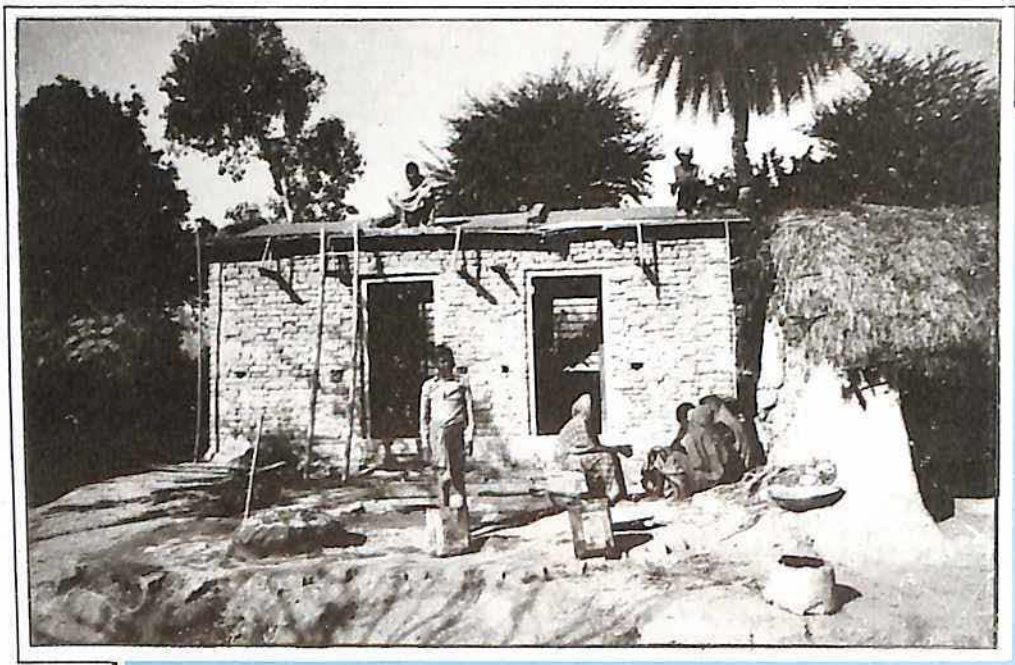
Lutheran World Service (India)

Emergency and Rehabilitation Unit



Annual Report 1988



AFTER DISASTER WHAT? was the perplexing problem of the earthquake victims. LWS is making a humble effort to provide houses.

(1) A house nearing completion.
(2) A completed house with two rooms 11′×8′ and 8′×8′.

With the Compliments

Em

of

Lutheran World Service (India)

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Cable LUTHSERVIS

A Report on the Activities of
Lutheran World Service—India

Emergency and Rehabilitation Unit during the year 1988

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FROM THE DIRECTOR, LWS (I)

Early in the year 1988 the E & R unit of Lutheran World Service (India) was busy finishing a housing programme for the flood victims in the state of Andhra Pradesh and was also completing a number of labour intensive projects (FFW) in the drought prone districts of Kalahandi and Koraput districts of Orissa State. Our drilling operations continued in Orissa providing drinking water to the drought prone villages.

We thought that the nature's fury will not lash heavily in the north eastern region because of the unprecedented floods in 1987. Yet it proved otherwise. The E & R Unit had to fight three major calamities one after the other, a severe flood situation and a cyclone in West Bengal and an earthquake of severe magnitude in Bihar State. In all the three major emergencies, the E & R Unit involved itself as much as possible to alleviate the miseries of the disaster victims. In Bihar State, the Government asked for our assistance in a housing project for the earthquake victims in the district of Madhubani. The request was to put up 500 permanent houses and the work has already commenced. The local Lutheran churches under the leadership of UELCI, also rendered massive relief to the victims in some of the areas. In the cyclone ravaged areas of South 24 Parganas also we are proposing to construct a number of primary schools which would also serve in future as flood or cyclone shelters.

Early this year, we had the privilege of receiving a large number of Commission Members of Lutheran World Federation, who came to India to attend the Commission meetings in Madras. Some of the Commission members and other participants were able to visit our housing programme in Andhra Pradesh State inspite of long and strenuous train journeys. We are grateful to them for their visit and for the encouragement given to us.

Our thanks go to our Headquarters in Geneva and our donors for their prompt response to our request for assistance in spite of other global pressing demands on them. We are grateful to the State Govts., of West Bengal, Orissa, Andhra Pradesh and Bihar for the timely co-operation and encouragement given to us in our efforts to assist the weaker sections of the community in distress. Let me also take this opportunity to express our heartfelt thanks to the UELCI/DSA and the Lutheran churches in India for their support, co-operation and guidance from time to time. Finally our thanks are due to all those who co-operated with our emergency unit in the discharge of their duties and to all those staff who worked hard to make this programme a success.

Erling Nielsen,
Director,
LWS (I), Calcutta.

January, 1989.

INTRODUCTION

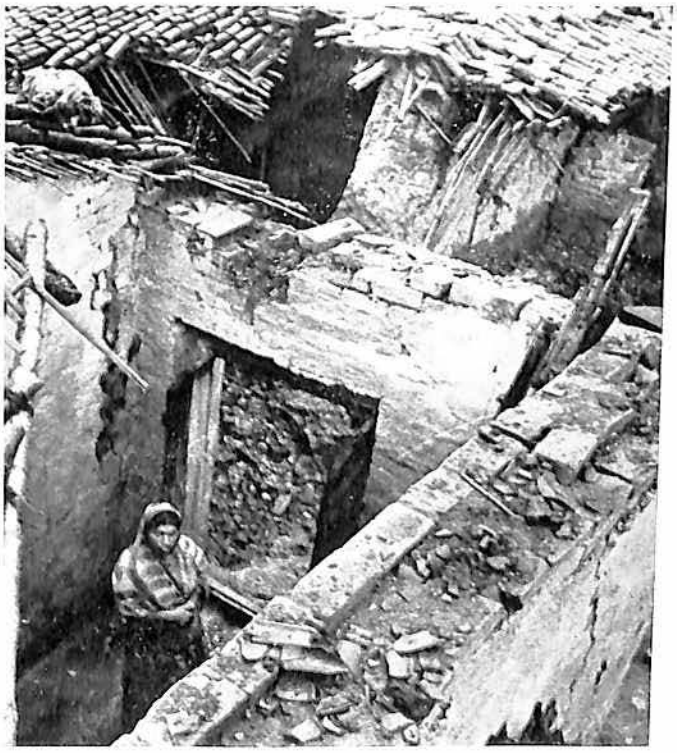
While this Annual Report for the year 1988 is being written, the Emergency and Rehabilitation Unit of Lutheran World Service (India) is actively involved in ten different operations in a widely scattered area, the States of Andhra Pradesh, Orissa, Bihar and West Bengal; Flood and cyclone emergency relief in West Bengal, construction of pucca houses for earthquake victims in Bihar, putting up of traditional houses and reconstruction of school buildings in North Bengal, sinking of shallow tubewells in the coastal area of Balasore district and providing employment for the landless labour and irrigation facilities for the drought victims in Orissa were some of the ongoing programmes or projects of the year. Twelve teams with a core staff of 52 and 84 casual workers are engaged in these operations. Besides these, the drilling division of the E & R Unit with its three rigs and 52 staff members on regular and casual basis are working in the drought prone areas of Kalahandi and Mayurbhanj districts of Orissa, Purulia and Bankura in W. Bengal.

In 1988, three major emergencies hit the north eastern region of India; the severe flood in Assam, Bihar and West Bengal in July, August and September, the earthquake that rattled almost the entire northern Bihar in August and the devastating cyclone that brought disaster to coastal West Bengal in December. As usual the weaker sections were the worst sufferers.

BIHAR EARTHQUAKE—HOUSING PROGRAMME FOR EARTHQUAKE VICTIMS

The Tragedy

At least 500 people were killed in Bihar and thousands injured as 'the century's second worst earthquake' in the sub-continent devastated northern Bihar at 4.45 A.M on Sunday the 21st August, 1988. The one minute quake with its epicentre about 70 to 80 KM northeast of Darbhanga district in Bihar was the strongest recorded in India since the quake of January 15, 1934. In Bihar the worst hit districts were Darbhanga, Madhubani, Munger and Saharsa followed by far flung districts like Nalanda, Patna, Bhagalpur, Purnea, Sitamarhi, Gopalganj, Biharsharif, Madhepura and Katihar. People were jolted out of their deep morning sleep as the windows and doors started vibrating and household belongings began rattling. In towns like Darbhanga and Laheriasarai the entire population was on streets within seconds and the town was 'dotted with a veritable mass of rubble of collapsed houses'. People were soon on their feet running



Inside a house destroyed by the fury of the earthquake in Bihar

to hospitals and nearby clinics with their injured people.

The tremors were also felt in West Bengal, Sikkim, Assam, Arunachal Pradesh, Mizoram, Manipur, Tripura, Meghalaya, Uttar Pradesh, Madhya Pradesh and Orissa. A number of cities and towns including Lucknow, Gangtok, Guwahati, New Delhi, Calcutta, Patna, Jamshedpur, Ranchi were also rocked. It is estimated by the Govt. of Bihar that 150,000 houses in Bihar have completely collapsed. In several parts, rail and road communications were disrupted following collapse or sinking of tracks, bridges and roads. Further, a flash flood followed by the earthquake in the same districts hampered all efforts of relief and it was a double curse.

Relief Operations by Voluntary Agencies

Both indigenous and international voluntary agencies have taken up relief operations to supplement the assistance given by the Govt. of Bihar. Rama Krishna Mission, Marwari Relief Society, United Evangelical Lutheran Churches in India, Catholic Charities, CASA, and Indian Red Cross are some of the voluntary agencies who took up work in the area to alleviate the miseries of the people.

Role of Lutheran World Service

In the meantime Lutheran World Service (India) has also been asked by the Govt. of Bihar to take up both relief and rehabilitation programme, for the earthquake victims in the affected areas. Madhubani district which was one of the worst hit districts in Bihar was assigned to LWS for a housing programme. As already mentioned according to the Rehabilitation Commissioner 150,000 houses have collapsed in Bihar and there was an urgent need for houses for their rehabilitation.

Madhubani District

Madhubani district is on the extreme north of Bihar State bordering Nepal. The land is plain flat and somewhat fertile with a population of 2.4 million people. The people are basically agriculturists and are economically poor. Hindus and Muslims form the majority. Schedule castes and schedule tribes are also in the area. Entire Madhubani district was affected by the recent earthquake. 98 people died, 1,124 people were injured, 41,244 houses were damaged out of which 8,000 had fully collapsed.

LWS two-roomed house for earthquake victims beside a ruined house

Description of the New House

LWS therefore made out a plan and estimate to put up a two roomed house 11'x8' and 8'x8' with thick brick walls and an open verandah 4' wide with reinforced concrete roof. As the cost of building materials has gone up considerably for items like cement, bricks, iron rods etc. the approx. cost would be Rs. 18,000/-. (US$ 1200).

Masons at work on the reinforced concrete roof of the new house

The construction has already commenced in Laukahi block in Madhubani district. Twentynine houses are in progress. Our present target is to construct 500 houses by the end of 1989.

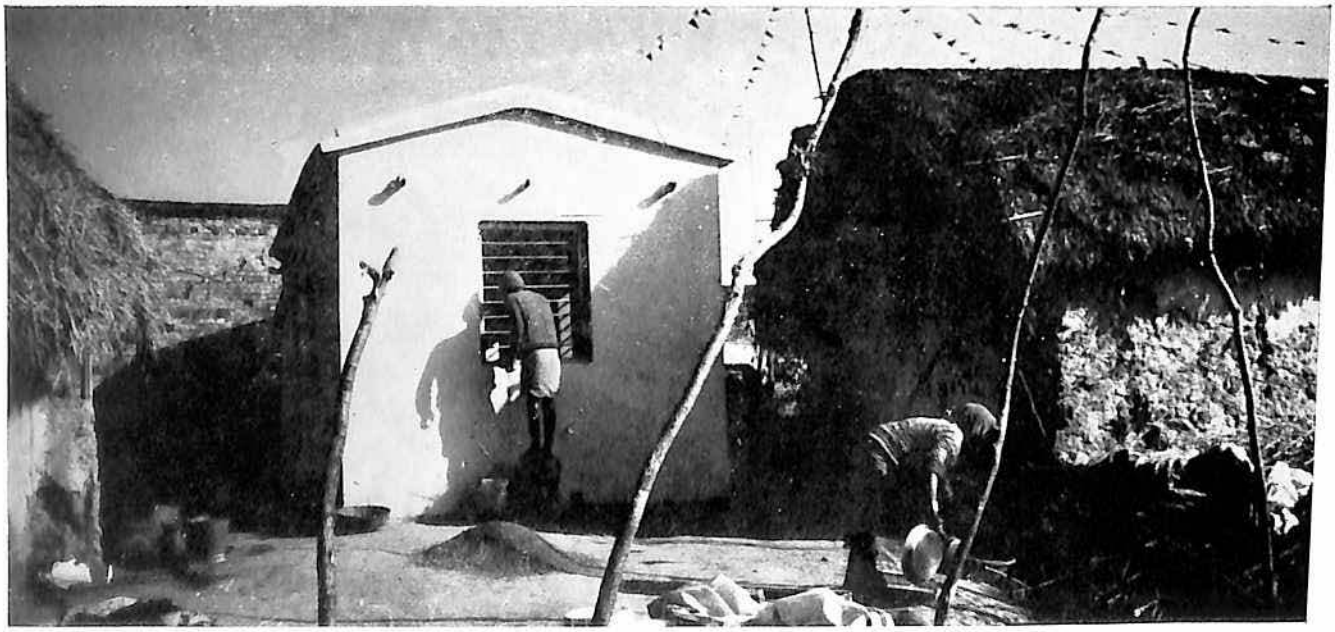
Laukahi Block in Madhubani is situated on the fringe of North Bihar with a population of 130,000 people with a mixed community of both

A newly completed house ready for occupation

Hindus and Muslims, although Hindus are in the majority. Schedule tribes and schedule caste form 30% of the Hindu population. Economically the area is backward with only one crop in the year and the majority of the population are agricultural day labourers.

People's Participation

Although the house construction is made mainly by skilled labour as masons and carpenters, there is a big role being played by the beneficiaries in the construction of these houses. The beneficiaries themselves are voluntarily putting up the verandah or the kitchen. Invariably for all the houses, beneficiaries are preparing their own flooring and all the unskilled labour that is required for the construction. So in the total construction of the house, each house owner is doing his mite to make the housing programme a success.



New roomy and airy LWS houses getting ready

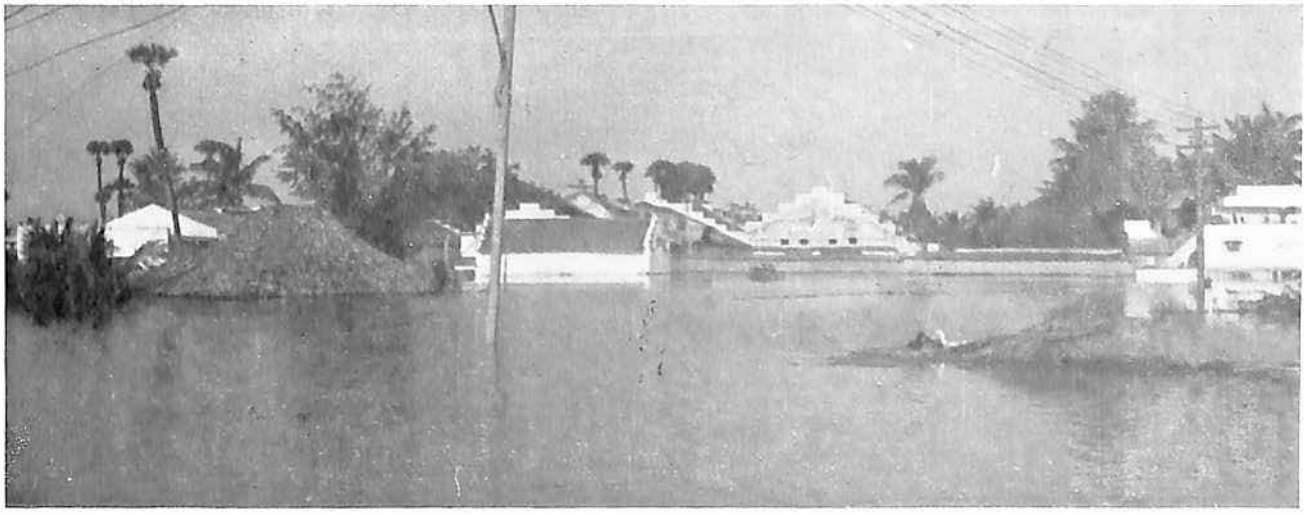
WEST BENGAL FLOODS

Again in 1988 seven districts in West Bengal *viz.,* Nadia, Birbhum, Murshidabad, Malda, West Dinajpur, Jalpaiguri and Cooch Behar were reeling under floods from August to September. According to Government assessment, nine million people were affected claiming 53 human lives. Crops on 1,27,000 hectares were destroyed. Hundreds and thousands of hutments either collapsed partially or were completely razed to the ground. The flood affected districts have also been hit by scarcity of drinking water with 70% of the tubewells going out of commission.

Before the community could recover from the after effects of the 1987 floods which hit almost the same area with equal or more severity, the people were again caught up in severe floods. From August 25th to September 4th, there has been incessant rain in the North Bengal disrupting life and communication of the entire area. Murshidabad, Malda and West Dinajpur were the ones that were badly affected. The entire north Bengal was cut off, the road communication were seriously disrupted. Even the relief supplies meant for the flood victims could not reach the victims due to the heavy floods and severe damage to roads and bridges on the national highways. The Govt. of West Bengal therefore airlifted and air dropped relief supplies in the affected areas.

Extent of flood fury in North Bengal

The Govt. of West Bengal without any respite arranged immediate relief operations in the affected districts. Large quantities of dry food were either air dropped or distributed to the marooned community; also distributed thousands of polythene sheets to give improvised shelter to the victims; organised more than 1,250 relief camps to give shelter to those who fled from their original moorings, mobilised large number of



A view of a few of hundreds of houses which collapsed in 1988 floods

medical teams to fight water-borne diseases. A few of the indigenous voluntary organisations, as well as political parties were in the field of relief.

LWS was asked to take up relief operation in one of the worst affected districts viz. West Dinajpur; Balurghat and Raiganj Sub-divisions. In West Dinajpur alone 250,000 people were shifted to 801 relief camps. The E & R Unit in collaboration with District, Block level Officials and Panchayats started nutrition programme for children, nursing and expectant mothers, distributed roofing materials for indigent and shelterless families who were living on national highways or embankments, provided dry food or rations, as immediate relief for a short period to prevent them from starvation. Tubewells were sunk to give drinking water facilities. As the winter was drawing near, the most needy families were given clothes, children's garments and blankets. The following is the list of relief items.

Shaping a new traditional type of a house for the flood victims

1. Nutrition (Milk and Emergency rations)	. . 44 centres	. . 14275 beneficiaries daily for a period of 3 months.
2. Polythene Sheets 15' × 13' × 1000 gauge		. . 2600 families.
3. Dry food/ration (pressed rice, wheat flour, batasa, etc.)		. . 20880 total beneficiaries.
4. Clothing (for adults and children)		. . 9240 -do-
5. Blankets		. . 5929 –do–
6. Tubewells		. . 50 nos.

Improvised shelters a regular feature during and after flood in W. Bengal

No restoration/rehabilitation programme was undertaken in the region, since the E & R Unit was already engaged in restoration programme related to 1987 floods both in Raiganj and Balurghat Sub-division, Twenty primary school buildings and one thousand traditional houses already taken up against the 1987 floods could not be completed because of the current years' floods in the same area. This restoration programme was considerably hampered and delayed. Nevertheless after the monsoon, some progress has been made.

Cattle and children equally shelterless in recent disasters

CYCLONE BATTERS WEST BENGAL

The 29th November, 1988 was one of the "darkest days of this century" for the State of West Bengal due to the unprecedented cyclonic storm that hit the coastal region of West Bengal rendering approx. 2 million people homeless and killing 434 people and 55,000 livestock. Six districts in the coastal belt of West Bengal, Midnapur, Howrah, Hooghly, South 24-Parganas, North 24-Parganas districts and Calcutta were severely battered destroying standing crops worth 19 crores (US$ 13.1 million) and damaging 200,000 hutments. Nearly 800 persons mostly fishermen were also reported missing from the coastal districts. North 24-Parganas and South 24-Parganas were the worst hit districts in the State. In spite of the warning for the impending calamity, issued, by the 'area cyclone warning centre', from 28th November onwards, because of the severity of the cyclonic storm nobody could escape the wrath of the cyclonic wind.

The combined fury of floods and cyclone in W. Bengal

Ravages in North & South 24 Parganas

Gosaba and Basanti blocks, in South 24-Parganas and Hingalganj in North 24-Parganas were really ravaged by the cyclone; destruction of life and property was rather heavy. According to the district authorities of South 24-Parganas, "the cyclonic storm was one of the worst of its kind which ever hit the State of West Bengal before".

One of the hundreds of school buildings after the cyclonic storm

During the storm the Forest Department of Sunderbans lost two of its launches with the crew. Apart from this, hundreds of trawlers, fishing boats which lay anchored on the side of the rivers were badly damaged. Fishing net which were spread over the rivers could not be removed and were damaged or lost. Fish water ponds were filled with debris with the result tonnes of fishes were killed (approx. 382 M.T. costing US $ 240,000).

Heavy Destruction of School Buildings

Almost all the school buildings, particularly the primary schools in the region are built of mud walls and thatch. Either in flood or in cyclone, these temporary shelters are easily washed away. Three hundred and twentytwo (322) such buildings collapsed in the three blocks of Gosaba, Basanti and Kultoli. The entire education of the primary school children is at a stand still. As all these school buildings are situated beyond the river systems, carrying building materials is a heavy expenditure. And therefore a primary school building constructed with brick and cement mortar with reinforced concrete roof, measuring 72' × 22' with five class rooms, a teacher's room, a verandah 6' wide and toilets will cost almost Rs. 200,000 (US $ 13,000). Each school can impart education to 250 to 300 pupils.

Clearing the debris after the cyclone in South 24-Parganas district in West Bengal

Relief Operations in South 24-Parganas

In South 24-Parganas district alone 1377 villages over an area of 2372 sq. km. were affected covering a total population of 1.95

million. It was in the midst of such devastation and destruction that the Govt. of West Bengal without a moment's delay, mobilised resources and rendered relief to the suffering community. Hundreds and thousands of camps were organised to accommodate cyclone victims. In the remote areas, dry food was distributed with the assistance of speed boats. Medical teams were organised to go in to the interior villages for the prevention of epidemics. Large stocks of Polythene sheets were distributed to provide improvised shelter to the community and also supplied blankets, clothing, children's garments etc. to the affected community. But even this assistance, was thoroughly inadequate and the cyclone victims were crying for more relief, food and shelter.

LWS Eenters the Fray

Indigenous voluntary agencies and international voluntary agencies were also rendering assistance to supplement the Government relief operations. Lutheran World Service was one of the voluntary agencies requested by the Govt. of West Bengal to render immediate emergency relief in South 24-Parganas district. LWS has mobilised its resources immediately and was in operation in 3 blocks namely Gosaba, Basanti and Kultoli. 5000 Polythene Sheets have already been distributed for the shelterless people and also an equal number of blankets and clothing, children's garments etc. to the affected community. Nutrition programme is in progress in all the three blocks to cover approx. 5000 beneficiaries each in each Block daily. A glass of milk and emergency ration (nutritious biscuit from Norway) is being distributed every day to children up to 6 years, and nursing and expectant mothers. The entire emergency relief operation will be over within a month's time when we propose to take up rehabilitation/restoration programme in the affected areas. The district authorities as well as the affected community are requesting LWS to construct as many permanent school

A nutrition centre in one of the Blocks in South 24-Parganas

buildings as possible and also sink tubewells in the area. If permanent strong built school buildings are constructed, the same would also serve as cyclone or flood shelters during disasters.

Acute Scarcity of Drinking Water

South 24-Parganas which is part of the Sunderbans, entirely depend on pond water for drinking purposes. These tanks with sweet water can often become brackish due to salinity by cyclone and flood, with the result, drinking water is in short supply. After the cyclone, drinking water was brought from the main land for the suffering community. So there is always a dearth of drinking water and as such request is there for tubewells as well. More than 250 tubewells are defunct in this area. Tubewells can be sunk only by manual rigs, a very time consuming process which will cost approx. 30,000 rupees (US $ 9,000) per tubewell.

To get potable water in the region one has to go very deep, 1000' ft. to 1200 ft.'. And this, with manual operation is risky and costly. Once the tubewell is sunk it will be maintained by the local Government authorities. In these remote areas a tubewell can provide water atleast to 50 families, that is approx. for 300 people.

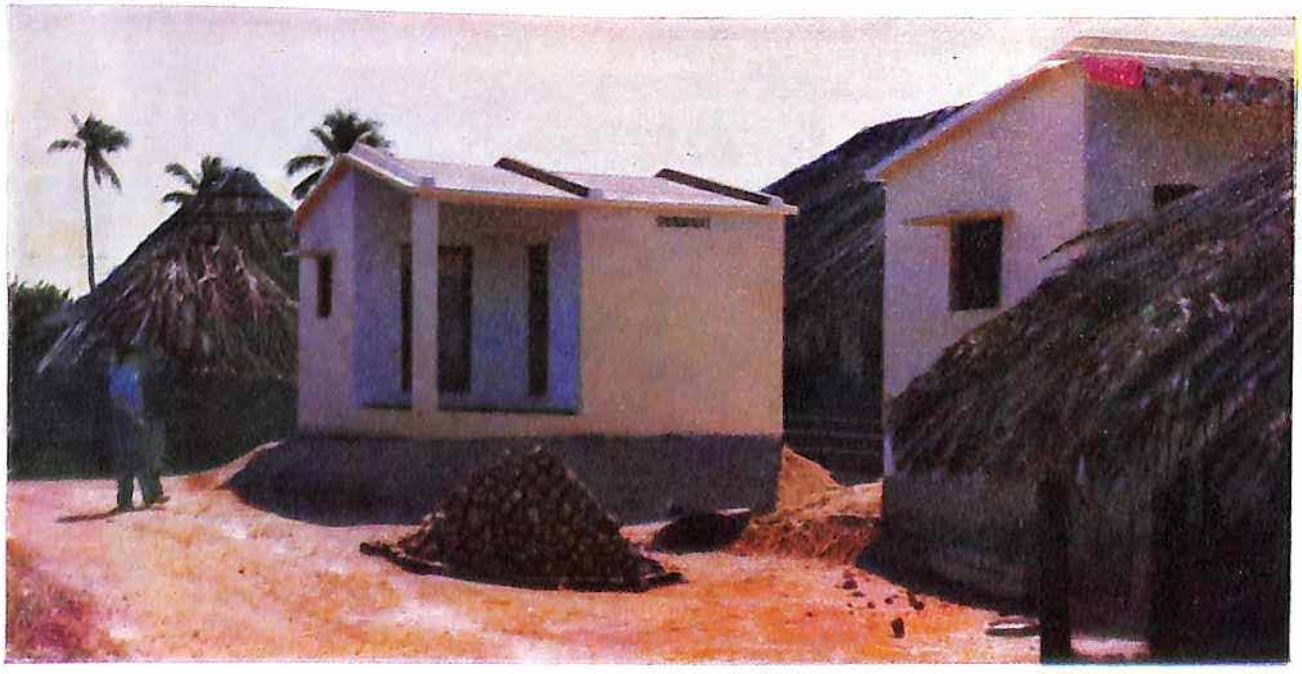
Proposed Restoration Programme by LWS

For the purpose of restoration programme, LWS is planning only to take up primary school building construction and some tubewells. If it is possible and if funds permit, we will also make an effort to clean the tanks which are brackish so that with the coming of the monsoon season, they will get sweet water in their respective ponds. But a proper survey is needed. We also propose to repair or strengthen damaged link roads mainly village roads or cross bandhs through food-for-work programmes.

People's Participation

In all these operations, right from the beginning of the relief operations to the completion of the restoration programme, the total community or the cyclone victims would fully cooperate in the total operation. With the limited number of volunteers on hand, the massive distribution programme was accomplished with the assistance of the local community. When the school construction programme will commence, the local community will participate fully with LWS team in carrying the building materials either by bullock carts or by head loads from the river side to the interior areas of the school, sometimes free of cost or sometimes for a nominal charge (as because ninety-nine percent of these affected people are day labourers with very limited resources). Clearing the debris, levelling of the school site, filling the foundation and the floor are ordinarily executed by the local community. This will also make them happy to feel that the building is their "own".

COMPLETION OF ANDHRA HOUSING FOR FLOOD VICTIMS



COMPLETION OF ANDHRA HOUSING FOR FLOOD VICTIMS

At the fag end of the year 1986 there was a devastating deluge in Andhra Pradesh particularly in the Godavari delta in the districts of East and West Godavari. The death toll was two hundred and fifty; 160,000 houses were razed to the ground and almost one million people were rendered homeless.

LWS at the request of UELCI initiated relief operations in 1986 and early in the year 1987 took up housing programme to provide habitation for atleast 1000 indigent flood victims, 300 in East Godavari and 700 in West Godavari. Each of these houses measuring 17'-6" × 8' consisting of two rooms and a verandah with reinforced concrete roof. But the progress of this housing scheme was hampered, first by the strike of the Government staff of the entire state for more than three months and then because of the non-availability of building materials as bricks, cement, timber etc. Atleast for once, we were forced to procure cement and timber from the neighbouring state of Orissa. Nevertheless by the end of 1987, seven hundred and fifty houses were ready for occupation.

In 1988 we continued the construction of houses. Although the budget was for the construction of 1000 houses, initially we got the assurance of funds, for putting up 900 houses only @ Rs. 14,000/- (US $ 933) per house. But before we completed 900 houses, we got a further assurance of funds and also could save a substantial amount in the construction cost with the result that we were able to complete 1075 houses, 305 in East Godavari and 770 in West Godavari. The actual cost of a house after completion was only Rs. 12,390/- (US $ 826).

In addition to the above at the request of the District authorities of West Godavari we completed the repair of 20 more houses, in the flood affected area, occupied by leprosy patients. The tile roofing of their houses, which had been broken and were leaking were replaced by reinforced concrete roof.

The entire housing operation for the flood victims in Andhra was fully completed by early August, 1988. It is worth mentioning that we had the full support and participation of the local community, the local Govt. authorities and the churches in the area. The UELCI Madras and the AELC authorities gave their valuable help and advice from time to time. LWS and their field staff are deeply grateful to all of them.

Bhadrachalam Housing Project

Before we completed our Andhra Housing Programme, the United Evangelical Lutheran Churches in India (UELCI) Madras had already approached the E & R Unit of LWS to put up a housing colony for 30 christian families in Arkur village belonging to the Good Samaritan Evangelical Lutheran Mission at Bhadrachalam. UELCI and LWS will accomplish this project on partnership basis.

The land made available for the construction is a hilly track and the local church authorities together with the beneficiaries agreed to level the land for housing and also to construct dug wells for water, required for the construction work. The beneficiaries, the local churches, UELCI and LWS and the district level Government authorities are participating in this project. A small LWS team is already working in the project and we hope to complete the same early in 1989.

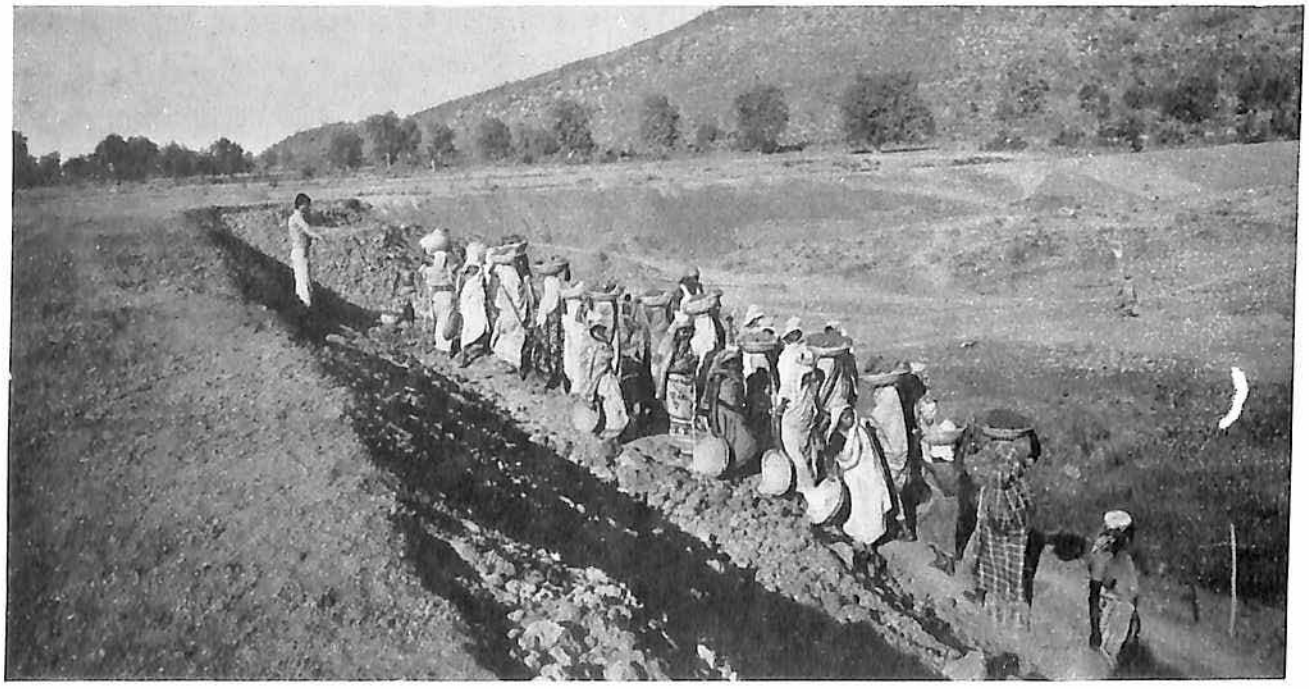
THE WOES OF KALAHANDI

The woes of Kalahandi seem to be unending. Rains failed in the district for the third consecutive year. Miles and miles of barren land greets one who travels through some of the non-motorable roads. In fact the district is devoid of any road worth the name.

The district has a population of 1.3 million people of which 48% are tribals and harijans. The literacy rate is only 20%. Seventyfive percent of the villages do not even have roads connecting them to Sub-divisional and block Headquarters.

According to reports, in this fourth successive year of drought, atleast 20,000 villagers were forced to desert their houses in search of jobs and food, mostly to the neighbouring states of Andhra Pradesh and Madhya Pradesh. It is also true that with no food and no work the villagers are forced to eat roots of trees and wild fruits which lead to diseases and even death. Safe drinking water is not easily available in hundreds of villages and the villagers drink contaminated water which is again a health hazard. It is in this state of affairs that the majority of the people in Kalahandi struggle for their existance.

The State Government and the district authorities are very much alert and aware of the helplessness of the situation and also put in additional resources and hard work to alleviate the misery of these drought affected villagers. Every year labour intensive programmes, irrigation schemes, safe drinking water projects and even gruel kitchens to provide cooked food are organised by the Government. Nevertheless the living condition of the people has not improved because of the perennial drought and the stark exploitation of the weaker sections, the tribals, harijans and girijans, by the well-to-do. In the midst of this tragic situation, LWS has volunteered to help the drought victims of Kalahandi at the request of the State Government; from 1985 in a continuous manner. Komna and Boden blocks in Nawapara, Subdivision, Narla, Lanjigarh, Bhawanipatna and Madanrampur in Bhawanipatna Sub-division were the areas of LWS concentration in the last few years. Nutrition programme for children, labour intensive projects to provide work for the landless and to create additional irrigation facilities and sinking of tubewells for potable water were continued in the field during the year.



Tribal Women participants of a food for work programme in Orissa

Some FFW Programmes initiated by LWS uninterruptedly from 1985 to 1988 were a boon to the hungry landless and the marginal farmers. It provided adequate food during the severe drought and also it prevented migration from their homes in search of food and work. More than all, they contributed their mite in creating permanent irrigation facilities big and small, and putting up roads for easy communication.

From the following list of projects one can measure the significant role played by the weaker sections in these blocks in collaboration with LWS.

			Mandays Involved
1985	Boden and Komna (Nawpara Sub-division)	.. 15 projects.	32,614
1986	-do-	.. 18 projects.	58,373
1987	Narla, Lanjigarh, Bhawanipatna (Bhawanipatna Sub-division)	.. 10 projects.	45,321
1988	Narla, Bhawanipatna, M. Rampur, (Bhawanipatna Sub-division)	.. 41 projects.	175,798

"Streams in the Desert" a Food for work project in the drought affected area of Orissa State

Out of 41 projects in 1988, 22 were funded by European Economic Community.

A completed irrigation project awaiting water

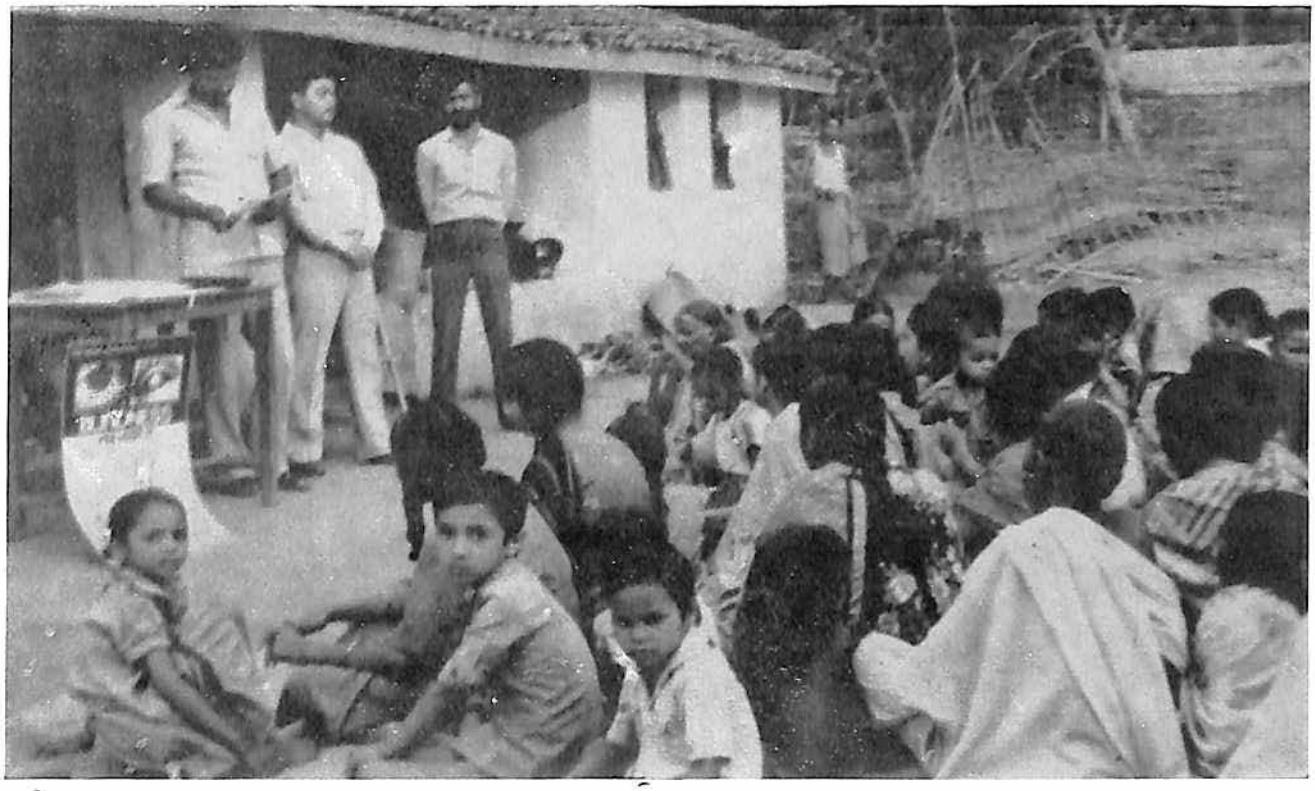
THE EMERGENCY MEDICAL & NUTRITION PROGRAMME KALAHANDI-ORISSA

(By Dr. R. K. Das)

In January '88 the drought affected district of Kalahandi in Orissa appeared on the headlines of newspapers with quite a number of deaths occurring there. Controversies arose as to the cause of the deaths such as meningitis and post measles complications. With the passage of time a general consensus surfaced regarding the widespread mal-nutrition prevailing there.

L.W.S. (I) moved into the 3 blocks namely Lanjigarh, Narla and Bhawanipatna in consultation with the government authorities and began the emergency medical and nutrition programme. The nature of this programme was a cold emergency to combat malnutrition. Hence the target groups were children especially the under 6 years of age, and lactating or pregnant mothers. The aim was to immunize the children and mothers, deworm where needed, correct the nutritional imbalance after detection by weighing, reduce anaemia and vitamin A deficiency and promote awareness on health matters. The staff consisted of 3 paramedical workers; each stationed at an assigned area in the different blocks under the supervision of a doctor who also rotated to provide primary curative services. The health workers started the day with the nutrition programme in which milk and emergency rations were distributed. This was followed by the medical programme in which the children were weighed; immunization against diptheria, whooping cough, tetanus and polio were undertaken. Vitamin A in oil, Folifer and anthelmentics where required, were

"Inseperable Twins" suffering from malnutrition at the Community Health Clinic



Community health education in Kalahandi by LWS E & R Medical Health Team

distributed. Other cases were treated if possible or else referred to the local government health centre.

In the afternoon and evenings the health workers went around the near-by villages to undertake family, group and mass meetings. During the programme span of 3½ months the total number of beneficiaries were 1,571 of which 72% were children.

The immunization programme was emphasised through education so that after withdrawal the remaining doses would be carried out at the government health centre to avoid drop-outs. The staff were equipped with vaccine carriers to maintain COLD CHAIN system in those remote areas where electricity did not exist. The central L.W.S. (I), Community Health Services also gave a thrust to the health education drive by organising one-day sessions in each block wherein slide shows and other media such as Posters and Flip charts were used.

This programme was supported by the government by providing all the Vaccines, Vit-A in oil, and nutritional supplements such Folifer (child mother) tablets. They also provided free accomodation for our Staff. The people helped us by providing volunteers and also School teachers came forward to assist us in the operation.

Immunization

	1st doses	2nd doses	3rd doses	Booster doses
D.P.T.	460	298	137	07
POLIO	403	131	55	08
D.T.	222	157	—	—
T.T. (Preg. mothers)	84	45	—	—

The total No. of Patients treated

Narla . .	4,118
Langigarh . .	3,854
Bhawanipatna . .	4,480
TOTAL . .	12,452

Health Education

Family Meetings . .	1087
Group Meetings . .	38
Mass Meetings . .	15
TOTAL . .	1140

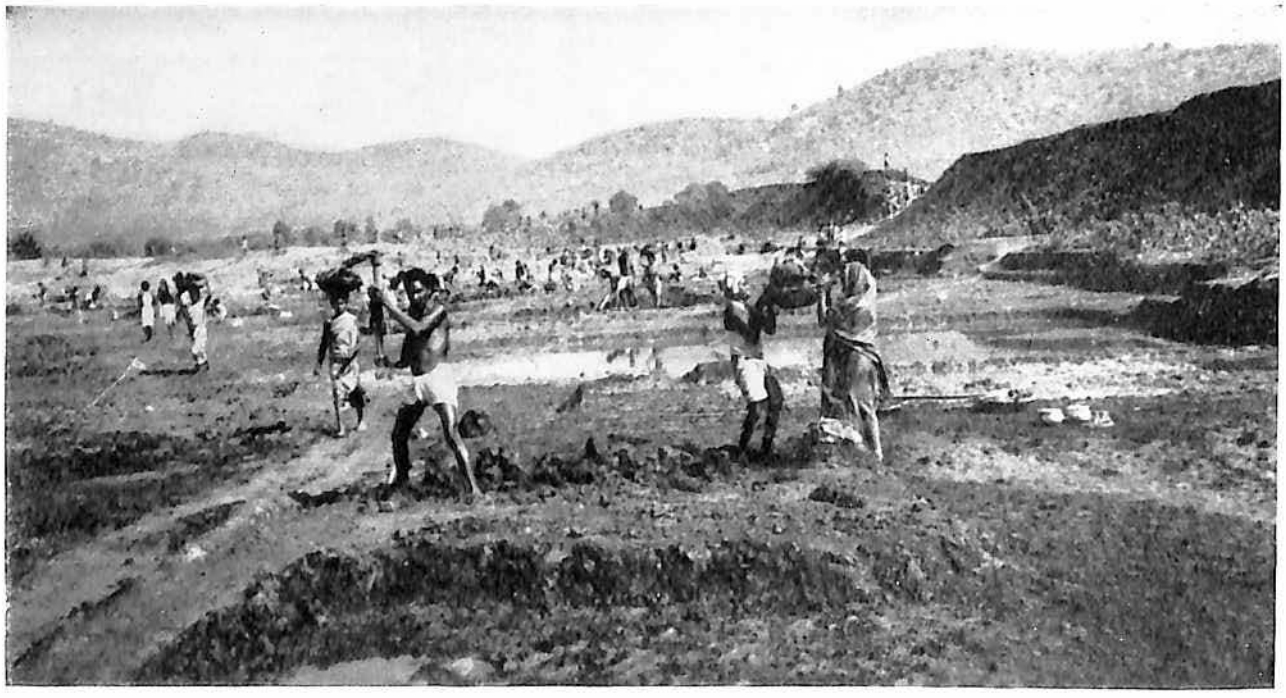
KORAPUT CONTINUES TO REEL UNDER DROUGHT

Koraput is adjacent to the poverty stricken district of Kalahandi. Being part and parcel of the drought prone region in Western Orissa, Koraput was also severely hit by drought in 1987. The drought conditions raised its ugly head in this district almost three years ago; worsened in 1986-87 and spread out in 1988 causing starvation deaths and famine in the district. In 1987, 300 starvation deaths were reported. Dasmampur, Bissum-Cuttack, Kasipur and Lakshimpur blocks were the worst hit in 1987 and the largest number of deaths were reported from these districts either due to starvation or mal nutrition or even eating inedible food such as roots of wild trees, leaves and herbs etc.

Koraput has a total population of 2.48 million people and nearly 50% of them are tribals. It is also true that the district remained pitifully under developed. Presently the State Government and a number of voluntary agencies are working round the clock to change this situation.

LWS was one such agency to take the initiative to help the drought affected community es-

A food for work participant receiving his reward



A large minor irrigation scheme in progress in Kalahandi district

pecially the weaker sections. Kashipur block with a population of 80,000 dominated by tribals was assigned to LWS by the district authorities and work commenced in November, 1987 and continued through out 1988. Nutrition programme, distribution of clothes for adults and children and labour intensive projects were undertaken.

All the labour intensive projects, mainly minor irrigation schemes or excavation of tanks were far in the interior of the block where working conditions were most difficult. The field staff had to cover long distances either by foot or by bicycle to cover distribution centre or a nutrition programme. To implement food-for-work projects. the field staff had to stay in remote villages at the site of the project where living conditions were very primitive. At one time a contagious fever spread all over the block and it virtually affected the entire field staff. It was under such hazardous conditions that the work was accomplished.

1. Nutrition Programme	3500 beneficiaries daily	. . five months.
2. Distribution of clothing	10000 adults 5000 sets for children.	
3. Labour intensive projects	11 nos. (10 minor irrigation scheme, 1 tank.)	

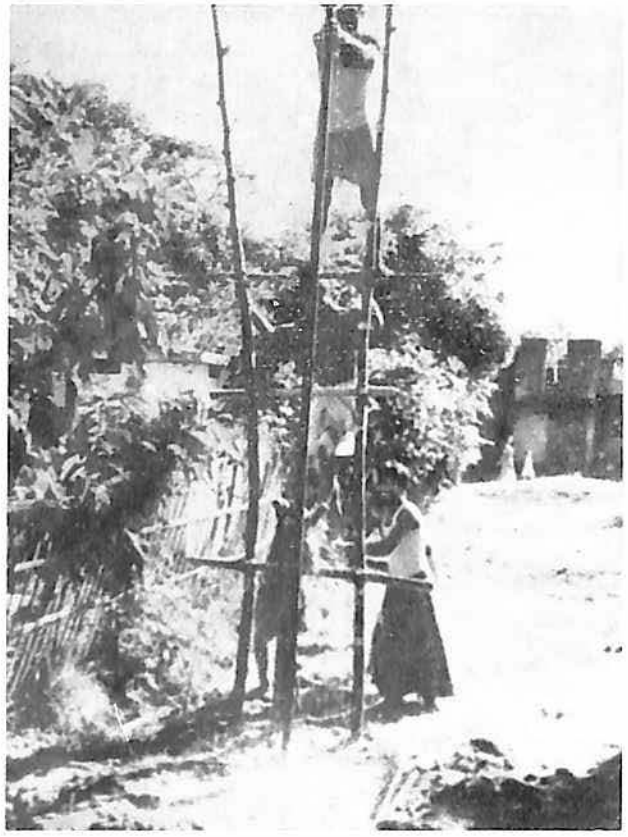
An irrigation scheme underway in Koraput district, Orrisa

LWS clothing distribution center

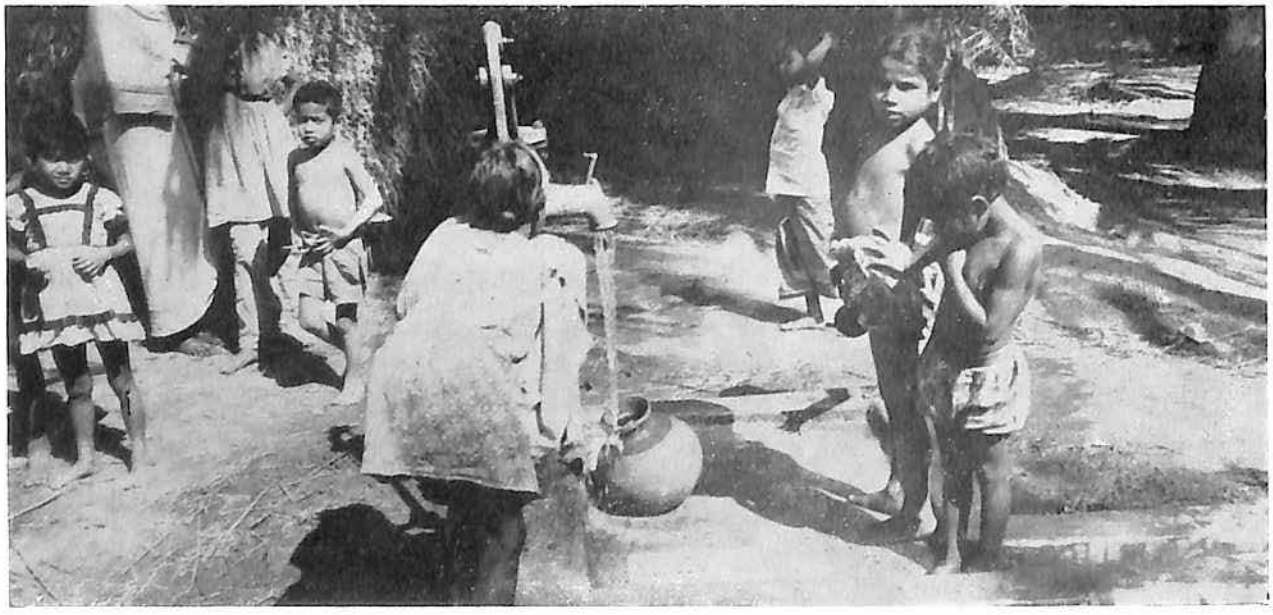
FLOODS AND DROUGHT IN BALASORE DISTRICT

Balasore district of Orissa is frequently battered by the vagaries of nature, sometimes by flood or cyclone and sometimes by drought or sometimes by both. While the coastal belt of the district is susceptible to flood or cyclone, the hilly tracks of Nilgiri or Oupada blocks are subjected to drought conditions. In 1988, although the floods were not as severe as in previous years, parts of Balasore and Bhadrak Sub-divisions were seriously hit. LWS was requested to put up tubewells for drinking water in some of the blocks especially in the saline belt. We were able to sink 125 tubewells in the following blocks with P.V.C. pipes to check corrosion.

1.	Basta	. . 1 No.
2.	Bahangan	. . 3 Nos.
3.	Balasore Sadar	. . 39 Nos.
4.	Remuna	. . 14 Nos.
5.	Jaleswar	. . 38 Nos.
6.	Bhograi	. . 1 No.
7.	Baliapal	. . 4 Nos.
8.	Dhamnagar	. . 10 Nos.
9.	Bhadrak	. . 7 Nos.
10.	Bhandaripokhari	. . 4 Nos.
11.	Tihidi	. . 4 Nos.



Manual sinking of a tubewell

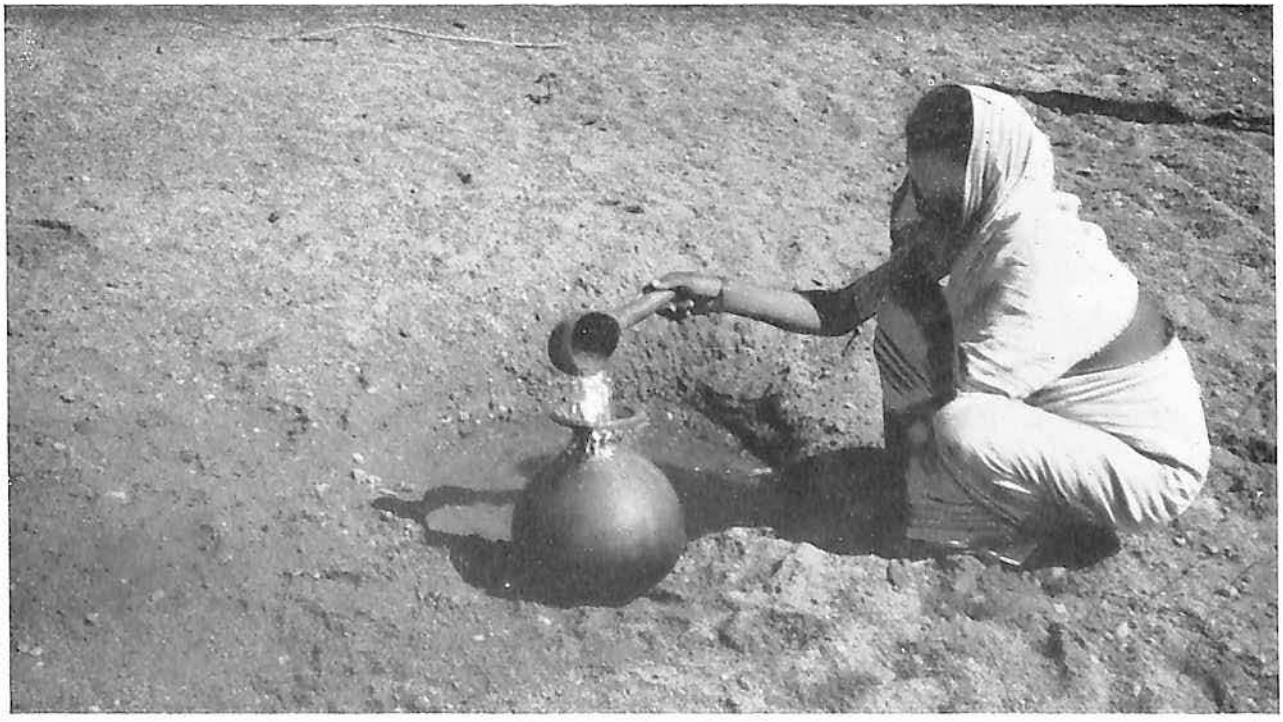


Thankfully drawing water from a completed tubewell

A Food For Work Reservoir

Simultaneously drought conditions prevailed in Nilgiri and Oupada blocks, a predominantly tribal area, and we initiated a nutrition programme for children and also food-for-work projects in the two blocks. Eleven projects are nearing completion.

There is also acute scarcity in the area for drinking water and we had a request from the district authorities to drill atleast 50 tubewells. As it is a hilly area only a powerful drilling rig can operate in the area and LWS is finalising a drilling programme in collaboration with the Government. The Government has agreed to bear 50% of the sinking cost.



Patiently spooning water from a dry river bed

WEST BENGAL FLOODS 1986 (COMPLETION OF RESTORATION PROGRAMME).

1986 floods in West Bengal which inundated the entire South of Bengal as Murshidabad, Midnapore, Hooghly, Birbhum, Howrah and South and North 24-Parganas was a reminder of the deluge of 1978. Calcutta city and suburbs were also under water for days together as in 1978.

Besides the Government's timely and massive relief operations a number of voluntary organisations were rendering relief and succor to the flood victims. LWS started its relief operations even when the flood waters were just rising in Calcutta and suburbs. With the consent and co-operation of the State Government, LWS further extended its operations in Howrah, South and North 24-Parganas district also. Dry ration distribution, medical aid, nutrition programme, distribution of clothing and blankets and distribution of plastic sheets to the homeless were immediately taken up and continued the relief operations from the end of September to December, 1987. Early in 1987 LWS began its restoration programme like construction of primary school buildings and sinking of tubewells. This programme continued beyond 1987 and were fully completed in early 1988.

A completed school building in Howrah Dist, W. Bengal

A completed school building in North 24-Parganas Dist. W. Bengal

A school girl drawing water from a tubewell

Primary schools completed in 1988, Howrah	. .	4 nos.
Primary schools completed in 1988, South 24-Parganas	. .	2 nos.
Tubewells completed in 1988, South 24-Parganas	. .	2 nos.

WEST BENGAL FLOODS 1987 (REHABILITATION PROGRAMME)

In 1987, from August to the end of September, almost for two months the whole of West Bengal was under floods causing untold misery to the people, loss of human life and livestock, severe damages to crop land, rendering hundreds and thousands of people homeless.

The floods in Malda and West Dinajpur 1987 were the severest. Out of a total population of 4.4 million in both the districts, 3.5 million people were affected. Approx. 250,000 hutments (in both the districts) were completely damaged. Hundreds of villages were washed away, without any trace of their existance. The State Government, district authorities, Panchayats and a number of voluntary agencies were in the field giving relief to the people.

Lutheran World Service also at the request of the Govt. of West Bengal organised relief programmes in Cooch Behar, West Dinajpur and Malda. For almost four months relief measures continued unabated particularly in two districts, Malda and West Dinajpur. Nutrition Programme, Medical Aid, distribution of clothing and blankets, distribution of polythene sheets and also distribution of dry ration reached approx. 885,000 affected people. Followed by the above, LWS proposed the following restoration programmes such as distribution of building materials, construction of primary school buildings and sinking of tubewells, labour intensive programmes etc.

Village children enjoying drawing water

Except for the distribution of building materials, other rehabilitation programmes commenced as

A school building under construction in Malda, North Bengal

scheduled early in 1988. Preference was given to food-for-work projects, where it was urgently required to provide work for the idling landless labourers. In Raiganj Sub-division 14 projects were implemented, tanks, reservoirs, roads etc. were put up for the community's benefit. In Malda, four projects were completed. To provide potable water to the flood famished people was also a priority and as such every attempt was made to sink tubewells in both the districts. Two hundred and twentysix tubewells were the target in both of the districts and by the end of the year 206 tubewells were completed.

Construction of a traditional house with benificiary participation

Forty primary school buildings in both the districts were planned and construction work began early in 1988. Each school consisted of 5 class rooms, a teacher's room, and sanitary facilities measuring 72' x 22' with a 6' verandah. As the construction work was in progress, we had yet another massive flood situation in 1988, in both the districts, like the one in 1987 and with the result, the construction of primary schools almost came to a stand still, since a large number of school sites were submerged under flood waters.

As it was impossible to give building materials to a very large number of affected families, in consultation with the state and district authorities LWS decided to provide traditional houses, 1000 each in each district, only to the most indigent families or where houses were washed away in the 1987 floods. It was agreed that the district level/Sub-divisional authorities jointly with LWS carefully select such families for this housing scheme (a very sensitive assignment for the authorities concerned) for implementation. There has been considerable delay in getting the list of beneficiaries as well as the sites. The flood situation in 1988 also hampered the progress of this scheme. In West Dinajpur the district authorities had already given the beneficiary list and the sites to LWS and the work is in progress. In Malda the situation is difficult, as the proposed sites for the housing scheme areas are under a bumper crop. Only after harvesting the crop the sites will be allocated for the housing scheme.

People's Participation

In the construction of the traditional houses in North Bengal the beneficiaries had to play an important role. Each house measuring 12'×10' with 4' wide verandah is made of 30 big size bamboos, 340 tiles, 20 ridges and 375 sq. ft. bamboo mat. Except for the construction of roof structure and the fixing of the bamboo mat by skilled labour, the beneficiaries were themselves responsible for the completion of the house.

	MALDA	WEST DINAJPUR
Food for work	4 completed	14 completed.
Tubewells	90 completed	116 ,,
Primary Schools	20 (nearing completion)	9 (nearing completion.)
Housing	NIL	52 (in progress.)

At the outset, the beneficiaries had to collect the building materials from the LWS distribution centre to their site, sometimes by headloads or by bullock carts. They themselves had to clear the debris of the old hutment or prepare a new site allotted to them by the local Government authorities, raise the land for a high plinth and also to do the flooring of the house and the verandah.

A skilled labour putting up the Bamboo matting wall

While visiting the house construction programme, one could see the joy on the face of the beneficiary for this gift of a house and their enthusiasm to complete "their" house in the best manner possible. Some of them are more ambitious to put up with their own efforts and resources either a kitchen or a cow shed attached to the new house.

A new "Home" is a joy for ever, grateful women giving finishing touches

E & R UNIT DRILLING DIVISION

New Bores for Tubewells

During the year all the three drilling rigs operated in the drought prone districts of Kalahandi and Mayurbhanj in Orissa State. The sites given by the district authorities were mostly in the interior areas and in unidentified villages where there were no drinking water facilities for the community.

These being far in the interior, road communication was almost unknown and the transportation of the rigs were posing a difficult situation to our crew. But the local needy community always came to our rescue by putting up temporary roads to reach the rig to the most difficult sites. Thus with the participation of the local community and the district and local level Govt. authorities in 1988, LWS drilling crew drilled 206 bores, out of which 183 bores were successful and the same were completed fully in all respects.

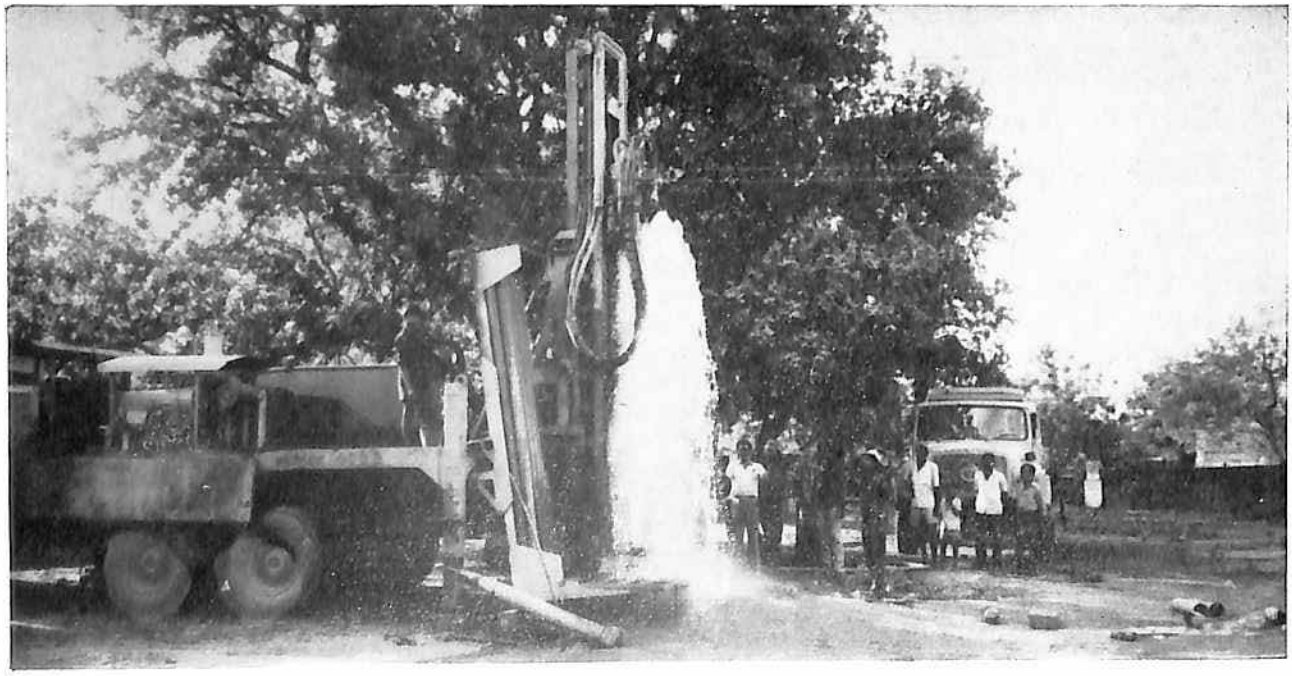
The Lutheran World Service drilling crew which gained considerable experience and training all these years, did their drilling operation in a systematic manner. The following are the different stages of operation.

1. Site selection by a ground water LWS investigation team, which is fully equipped for the purpose.
2. Followed by the site selection, the actual drilling operation commences in any type of soil, either rocky or any other difficult soil formation.
3. If the bore is successful, then follows insertion of the tubewell pipes and the installation of India Mark II Heads with a proper platform to protect the tubewell.

Hand Pump Caretakers Training

In all the above operations we always seek the participation of the local community. LWS Drilling crew and field staff wherever took up tubewell programme tried to create an awareness in the community about safe drinking water and the dangers of using polluted water causing health hazards and encourage them to focus their attention to a new community life of health and hygiene. They also tried to educate the local community how to handle and maintain a tubewell. From the informal survey conducted, we found that too many projects failed mainly because of lack of maintenance of the tubewells.

With this in view LWS organised a Training Programme for Hand Pump Care Takers. Lutheran World Service, UNICEF and Public



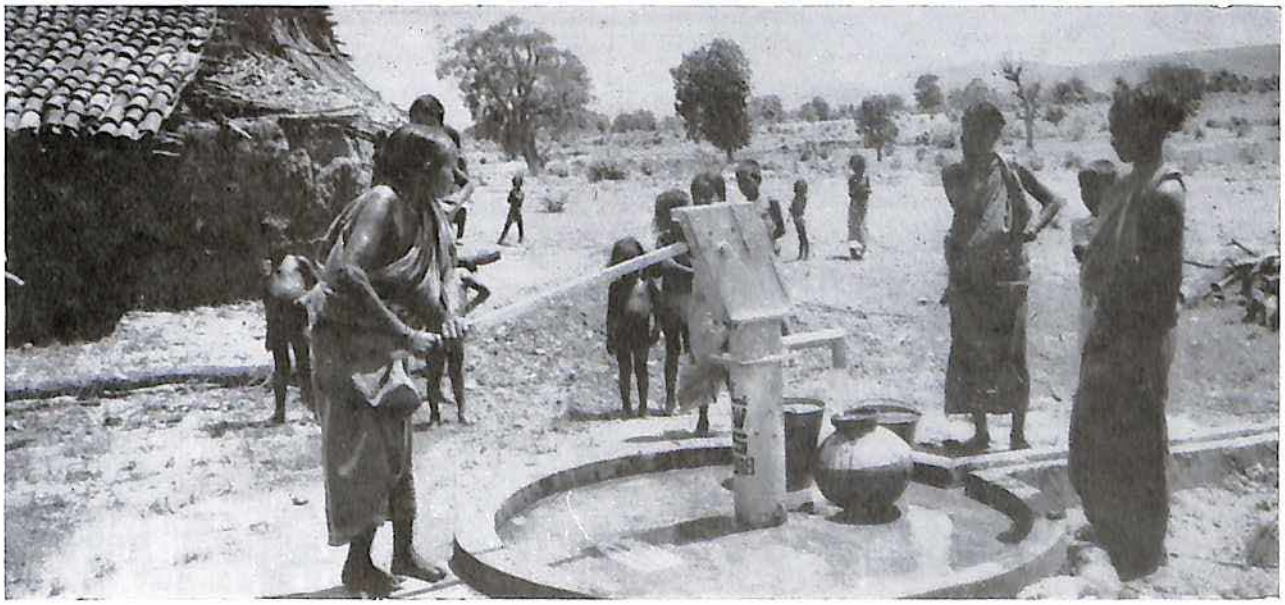
Water in abundance spouts from a tubewell sunk by an LWS drilling rig

Cheerful village women at a training programme in Kalahandi

Health Engg. Deptt. of the Govt. of Orissa and local community participated in this training programme. The uniqueness of the programme was that 50 women from 50 villages were invited to attend this training programme conducted for two days in Khariar Road in Kalahandi district. The women and their folks who attended the training went back to their villages as *real care takers* of the tubewells of their respective villages. At the closing function the participants were provided with minimum tools, a certificate, a gift and some post cards for reporting in case of break down to authorities concerned very promptly.

LWS Drilling Division will continue such training programme in the rural areas in the future also as it is an effective measure to maintain the tubewells and to educate the rural community for their benefit for years to come.

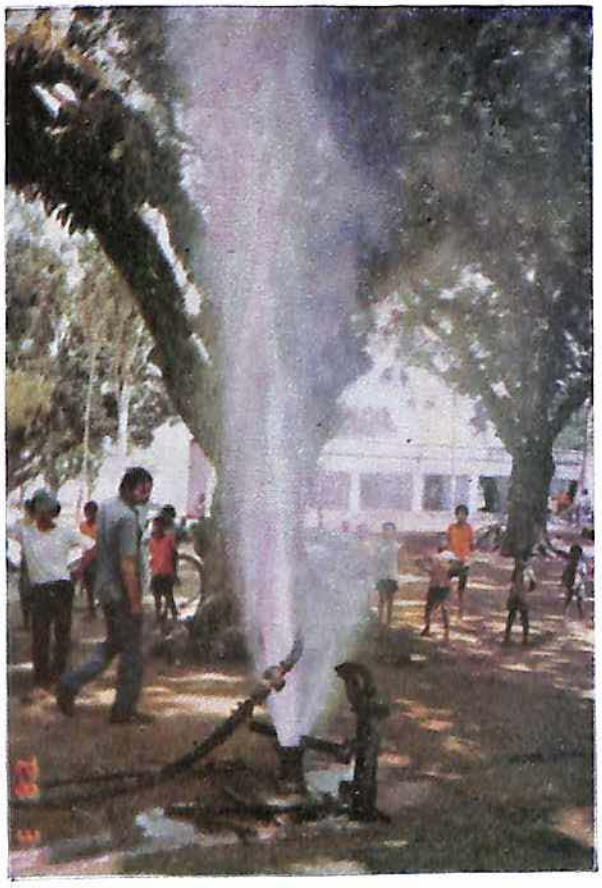
Community youth being instructed in maintenance of tubewell



India Mark II hand pump working with ease

REJUVENATION PROGRAMME

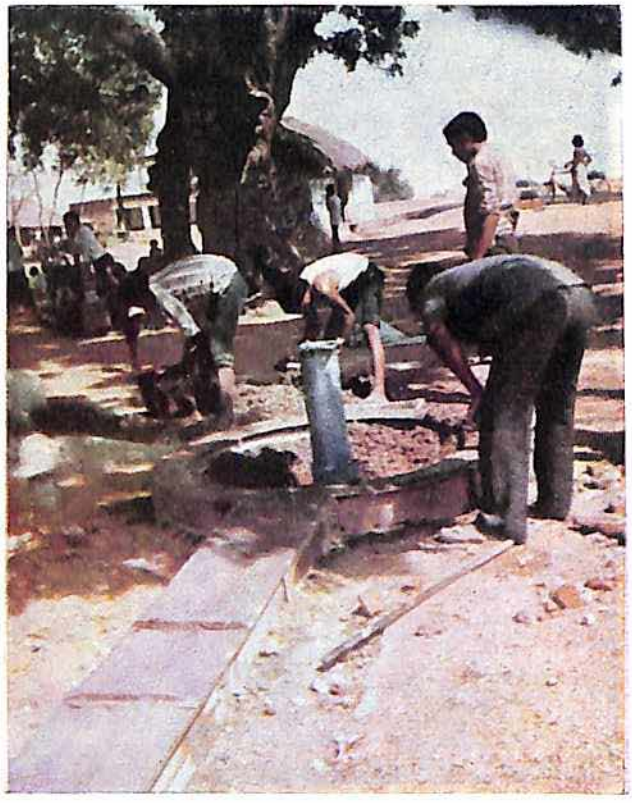
Lutheran World Service, Public Health Engineering, Govt. of West Bengal and UNICEF unitedly initiated a tubewell rejuvenation programme in 1986. LWS was given the responsibility of implementation of this project,



Water gushing out from a newly rejuvenated tubewell in Purulia

while the PHE and UNICEF arranged tubewell materials such as Hand Pumps and Pipes transportation and a compressor. By the end of May 1988 LWS rejuvenated 351 old and defunct tubewells out of 749 sites covering the whole district of Purulia in West Bengal. By the rejuvenation method each tubewell was properly cleaned with the help of a compressor, new platforms constructed and new pump heads installed. It may be mentioned here that LWS from 1977 to 1986 sunk 901 successful tubewells in Purulia district as Purulia was one of the worst drought prone areas in West Bengal.

With this successful rejuvenation programme, the PHE as well as UNICEF requested LWS



Reconstructing a platform for a rejuvenated tubewell

to continue this drinking-water saving operation in the adjoining district of Bankura also. In June, 1988 after an initial survey the work commenced and by the end of December 75 tubewells out of 650 were redeemed. The work is continuing; and the PHE and the UNICEF are fully participating in this programme.

REVIEW OF TUBEWELLS DRILLED BY LWS (1982-1986)

During summer months of April-May, 1988 the Public Health Engineering Department, Govt. of Orissa conducted an inspection of borewells drilled by Lutheran World Service (India) during the period from 1982 to 1986 in Mayurbhanj district. According to the inspection statement, out of 106 tubewells, 105 tubewells were found to be good, giving 10 litres to 14 litres of water per minute.

Lutheran World Service (India) follows the Government specified depth (50 metres at present) and discharge rates in borewell drilling programme.

Young 'women mechanics' handling hand pumps

We are also happy to mention, that the Govt. of Orissa, through the state and district level Officials participates in the drilling programme by sharing the sinking cost by Rs. 10,000/- per tubewell.

STAFF TRAINING

During the year, Drilling Division was able to arrange training for its staff for overall improvements. In addition to the regular "on-the-job training", the following training courses were attended by some of the staff members during the year.

(a) Borewell Hand Pump Technology conducted by UNICEF & P.H.E. at Bhubaneswar.

(b) Waterwell Drilling in Soft Rock Formations conducted by AFPRO & TISCO at Jamshedpur.

(c) ODEX Drilling method conducted by Atlas Copco & LWS at Kalahandi (within the project area).

OURSELVES

The success of any organisation big or small engaged in relief and rehabilitation operations which go on sometimes like a rivulet or like an endless stream year after year depend entirely on the implementing field staff at various levels more especially at the grass-root-level; their dedication, sincerity and sense of responsibility for the cause entrusted to their care against all odds, frustrations, disappointments and tensions. LWS E&R Unit has been fortunately blessed by such a team of field staff. The entire unit worked as a team or as members of a family to achieve their goal.

Whether they are far in the interior forest areas of Kashipur block in Koraput district of Orissa State, or in Laukahi block of Madhubani district of Bihar, where living is still in primitive conditions or at Arkur village in Khammam district in Andhra Pradesh rampant with Naxalite activities or in an inacessible drilling site in Kalahandi district of Orissa, the E&R Unit field staff carried out the programme or project with ungrudging devotion.

In all the field operations the field staff maintained very good relationship with the district Officials, block authorities and the Panchayats, above all with the local community and the distressed people themselves. With the result, accommodation for volunteers, godowns for storage of supplies are often arranged by the local community, the local BDO or Panchayat and sometimes free of cost or perhaps at a nominal rent. This local participation or partnership with the local community certainly added to the success of the total operation.

Except for the supervisory staff and a few core field staff, the E&R Unit depends on casual volunteers selected locally or by the H.Q. for individual emergency operations. Most of them are from the educated unemployed and who are most willing to take any assignment in the field.

During the course of the year two senior staff members went abroad for training programmes. Mr. K. G. Mathaikutty was away in Bangkok at Asian Institute of Technology for a 6 weeks course on "Disaster Preparedness". Mr. P. J. Chacko took leave and joined the Asian Rural Institute in Japan to study rural development.

The E & R Unit Executive Committee met eight times during the year to transact urgent and important matters regarding Emergency and Rehabilitation Programmes.

P. C. Joseph
Emergency Officer

STATISTICS 1988

NUTRITION PROGRAMME—ORISSA & WEST BENGAL

Area	Total No. of Beneficiaries	Daily Average	Commodities Utilised		
			Milk Powder		Emergency Ration
			kgs.	Bags	Cartons
ORISSA					
Koraput	242,497	3,456	7,275	291	450
Kalahandi	38,333	350	1,150	46	112
Balasore	187,497	2,069	5,625	225	450
WEST BENGAL					
Raiganj	248,807	8,480	7,250	290	820
Balurghat	150,006	5,795	4,500	180	730
Kultoli	34,192	3,439	1,026	41	78
Basanti	13,977	1,874	419	17	34
Gosaba	10,151	1,926	305	12	30
	925,460	27,389	27,550	1,102	2,704
Through Dev. Deptt.	91,667	—	2,750	110	—
Through other Organisations	—	—	4,975	199	
	1,017,127	27,389	35,275	1,411	2,704

ROOFING MATERIALS (PLASTIC SHEETS)—WEST BENGAL, BIHAR, ORISSA.

Area	No. of pcs. distributed	No. of families benefitted
WEST BENGAL		
Raiganj	2,600	2,600
Kultoli	888	888
Basanti	244	244
BIHAR		
Saharsa	2,000	2,000
ORISSA		
Balasore	110	110
	5,842	5,842

DRY RATION DISTRIBUTION (WEST BENGAL)

Area	Families benefitted	Wheat Flour kgs.	Pressed Rice kgs.	Batasa kgs.
Raiganj	20,880	907	19,992	1,000

MEDICAL PROGRAMME WEST BENGAL AND ORISSA

Area	Total cost of Medicines
West Bengal (St. John's Ambulance)	Rs. 12,111
Orissa, Kalahandi	Rs. 94,024
	Rs. 106.135

FAMILY ASSISTANCE (Distribution of clothing) **TUBEWELLS BY HAND BORING**

Area	Adults Nos.	Children sets	Blankets Nos.	Beneficiaries	Total Target	Total No. of Tubewells sunk	Average Depth of each tubewell
West Bengal							(Mtr.)
Balurghat	3,000	3,000	1,500	7,500	30	28	37.18
Raiganj	4,620	4,620	5,919	15,159	106	90	37.48
Malda	4,128	4,165	1,947	10,240	90	90	54.68
Basanti	496	496	—	992	—	—	—
Kultoli	—	—	3,402	3,402	—	—	—
Magrahat	—	—	—	—	2	2	253.38
ORISSA							
Koraput	10,000	10,000	—	20,000	—	—	—
Kalahandi	14,700	11,200	6,000	31,900			
Balasore	—	—	—	—	125	125	50.38
	36,944	33,481	18,768	89,193	353	335	—

DRINKING WATER (TUBEWELLS) BY RIG

Area	Total No. of Tubewells sunk	Average Depth of each tubewell
ORISSA		(Mtr.)
Kalahandi	124	50
Mayurbhanj	59	48
	183	
WEST BENGAL (REJUVENATION)		
Purulia	92	—
Bankura	75	—
	167	

PERMANENT HOUSES

Area	Total target	No. of houses taken up	No. of houses completed	Average cost per house
ANDHRA PRADESH				
East Godavari (Rajahmundry)	61	61	61	Rs. 12,050
West Godavari (Bhimavaram)	525	525	525	Rs. 12,100
BIHAR				
Laukahi	500	29	2	Rs. 18,000
	1,086	615	588	

TRADITIONAL TYPE OF HOUSES

Area	Total target	No. of houses taken up	No. of houses completed	Average cost per house
WEST BENGAL				
Malda	1,000	—	—	—
Balurghat	500	17	3	Rs. 2,400
Raiganj	500	35	6	Rs. 2,400
	2,000	52	9	

CONSTRUCTION OF SCHOOL BUILDING

Programme	Area	No. of schools target	No. of schools completed	Average cost per school Rs.
West Bengal Flood	Magrahat	2	2	165,000
West Bengal Flood	Howrah	4	4	162,000
North Bengal Flood	Raiganj	15	—	168,000
North Bengal Flood	Balurghat	5	—	170,000
North Bengal Flood	Malda	20	—	168,000
		46	6	

FOOD FOR WORK

Area	Project	Earthwork completed cft.	Mandays involved	Commodities Utilised			
				Wheat kgs.	Rice kgs.	Atta kgs.	Ragi kgs.
ORISSA							
Kalahandi	16	*4,988,539	82,570	—	311,632	—	—
Kalahandi	—	**5,826,846	93,228	62,500	373,152	—	—
Koraput	12	*2,523,659	50,875	97,107	84,747	—	10,990
Balasore	11	*2,250,400	28,111	18,174	89,170	—	—
WEST BENGAL							
Malda	3	565,731	6,179	49,853	—	—	—
West Dinajpur	14	4,215,178	20,285	—	—	87,073	—
	56	20,370,353	281,248	227,634	858,701	87,073	10,990

Summary of food for work Project

Project	West Bengal		Orissa		Total	
	Nos.	Area	Nos.	Area	Nos.	Area
Tank/Dam	1	177,943 cft.	30	13,563,478 cft.	31	13,741,421 cft.
Bundh			1	.25 K.M.	1	.25 K.M.
Road	16	8.5 K.M.	2	19.75 K.M.	18	28.25 K.M.
Canal			6	3 K.M.	6	3 K.M.

Statement of Commodities Imported Duty Free during the year ended 31.12.1988

Sl. No.	Quantity	Commodity	Mode of shipment	Month and year of receipt	Purpose of Donation	Donor's name and address
1.	1429 cartons	Emergency Ration	Sea—Nedlloyed Everest	June, 1988	Emergency Relief	Norwegian Church Aid, Oslo, Norway.
2.	1490 cartons	-do-	Sea—Canadian Voyage	August, 1988	-do-	-do-

*12 Projects are in progress in Koraput and 11 projects in progress in Balasore.
**In addition to 16 projects, 20 projects of 1987 fully completed.

STATEMENT OF EXPENDITURE 1988

	Amount Rs.	Amount US$
Distribution of Donated Commodities	1,110,785	79,517
Provision for Emergency 1988	1,481,387	111,185
Work Project	4,269,422	309,619
Cyclone (West Bengal & Orissa)	78,691	6,223
Godavari flood (Housing)	2,667,385	206,506
Flood (West Bengal)	885,103	69,133
Drought Programme (Orissa)	924,452	82,930
Flood Programme Phase — I (North Bengal)	1,028,566	81,110
Flood Programme Phase — II (,, ,,)	5,366,230	396,630
Bihar Earthquake	305,717	21,557
Non designated A/c EEC funds for Kalahandi	1,153,245	91,165
Funds provided by Lutheran World Service	19,270,983	1,455,575
Funds provided by Govt. of Orissa for : Housing Balasore	108,000	7,633
Total funds utilised	19,378,983	1,463,208
Approx. value of LWS Donated Commodities : Milk & Emergency Ration	2,341,784	165,731
Total resources administered during the year for Emergency & Rehabilitation Programme	21,720,767	1,628,939
In addition to the above, the E & R Unit administered the Drinking Water Programme of Project WHAT 1988		
Funds provided by L.W.S. Project WHAT	3,530,642	268,409
Funds provided by Govt. of Orissa (Drinking water)	1,939,977	144,044
Funds Provided by Other Sources	8,000	586
Approx. value of LWS Donated Commodities (Rig parts)	212,999	15,051
Total resources administered for Drilling Division in 1988	5,691,618	428,090
Grand Total resources administered for E & R and Drilling Division Programmes during the year	27,412,385	2,057,029

Accomplishments of the E & R Unit at a glance—1974 to 1988

Type of activities	1974-1987	1988	Total	Unit
1. a. Traditional/Permanent houses	12,553	597	13,150	Families
b. Housing Aid	24,462	—	24,462	"
c. Temporary shelter	64,242	5,842	70,084	"
2. a. Tubewell (Manual)	6,538	335	6,873	Nos.
(i) Tubewell (Rig) 86 & 87* only	579*	350	929	"
b. Open Well	68	—	68	"
3. Food/Cash-for-work				
a. Wheat, Rice, Atta	11,559	1,184.4	12,743.4	M. Tons.
b. Cash	Rs. 5,06,550 (US$ 50,655)		Rs. 5,06,550 (US$ 50,655)	— —
c. Tank/Dam	301	31	332	Nos.
i) Earthwork in cft.	78 million	20 million	98 million	Cft.
ii) Area covered for irrigation	7,520	720	8,240	Acres.
d. Village roads	160 (468 K.M.)	18 (28.25 K.M.)	178 (496.25 K.M.)	Nos.
e. Canals	40 (85 K.M.)	6 (3 K.M.)	46 (88 K.M.)	Nos.
f. Bundh/Embankments	99 (185 K.M.)	1 (.25 K.M.)	100 (185.25 K.M.)	Nos.
4. Cleaning of Polluted Tanks for sweet water	2,061	—	2,061	Families
5. Agriculture Assistance (Seeds)	47,478	—	47,478	"
6. Nutrition Programme (milk and E. Returns)	3,766	69	3,835	M. Tons.
7. School Buildings	385	6	391	Nos.
8. Clothing/Blankets/Utensils	1,202,873	89,193	1,292,066	Nos.
9. Medical Aid	254,458	—	254,458	Patients.

THE PROJECTS WERE ADMINISTERED AND IMPLEMENTED BY

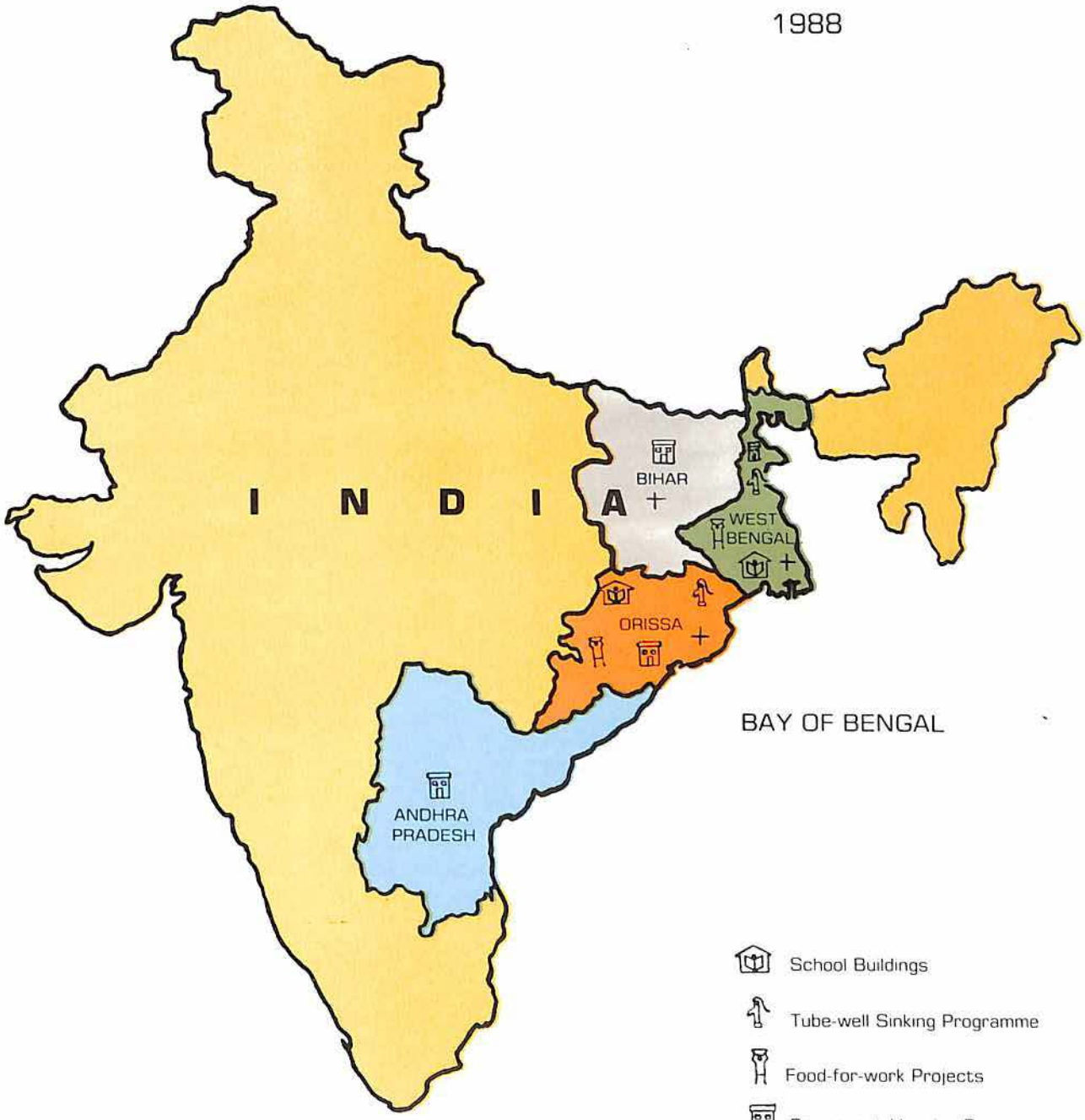
Mr. Erling Nielsen	Director
Mr. G. S. Banerjee	Deputy Director
Mr. Christiaan Minderhoud	Finance Adviser
Mr. P. C. Joseph	Emergency Officer
Mr. S. K. Ganguly	Dy. Chief Accountant
Mr. A. K. Ghosh	Administrative Officer
Mr. T. K. Chatterjee	Jr. Accounts Officer
At the districts:	
Mr. A. K. Biswas	Dy. Programme Co-ordinator, Andhra Pradesh/Bihar
Mr. A. S. Baidya	Project Officer, Howrah/Balurghat, West Bengal
Mr. R. N. Saha	Project Officer, Kalahandi, Orissa
Mr. Naresh Chakraborty	Sr. Project Assistant, West Dinajpur, West Bengal
Mr. Sushil Chandra Saha	Sr. Project Assistant, Malda, West Bengal
Mr. P. J. Chacko	Sr. Project Assistant (on leave for training)
Mr. Nitai Chandra Dutta	Sr. Project Assistant, Koraput, Orissa/Bhadrachalam, Andhra Pradesh
Mr. P. K. Sarkar	Sr. Project Assistant, Nilgiri, Orissa/Basanti & Gosaba, West Bengal
Mr. Tapan Dutta	Gosaba, West Bengal
Mr. Prasanta Kumar Dan	Balasore & Koraput, Orissa State
Other Regular staff	41 nos.
Casual volunteers/helpers	137 nos.
Drilling Division	
Mr. K. G. Mathaikutty	Dy. Programme Co-ordinator (H.O. & Districts)
Mr. V. V. Mathai	Project Officer—Maintenance
Mr. S. Mohanty	Project Officer—Geophysicist (Resigned)
Mr. Ashim Kumar Sarkar	Sr. Project Assistant, Kalahandi, Orissa
Mr. Nitya Gopal Saha	Sr. Project Assistant, Rairangpur, Orissa
Mr. Achintya Kumar Saha	Sr. Project Assistant, Purulia/Bankura, West Bengal
Other Regular staff	32 nos.
Casual staff	18 nos.

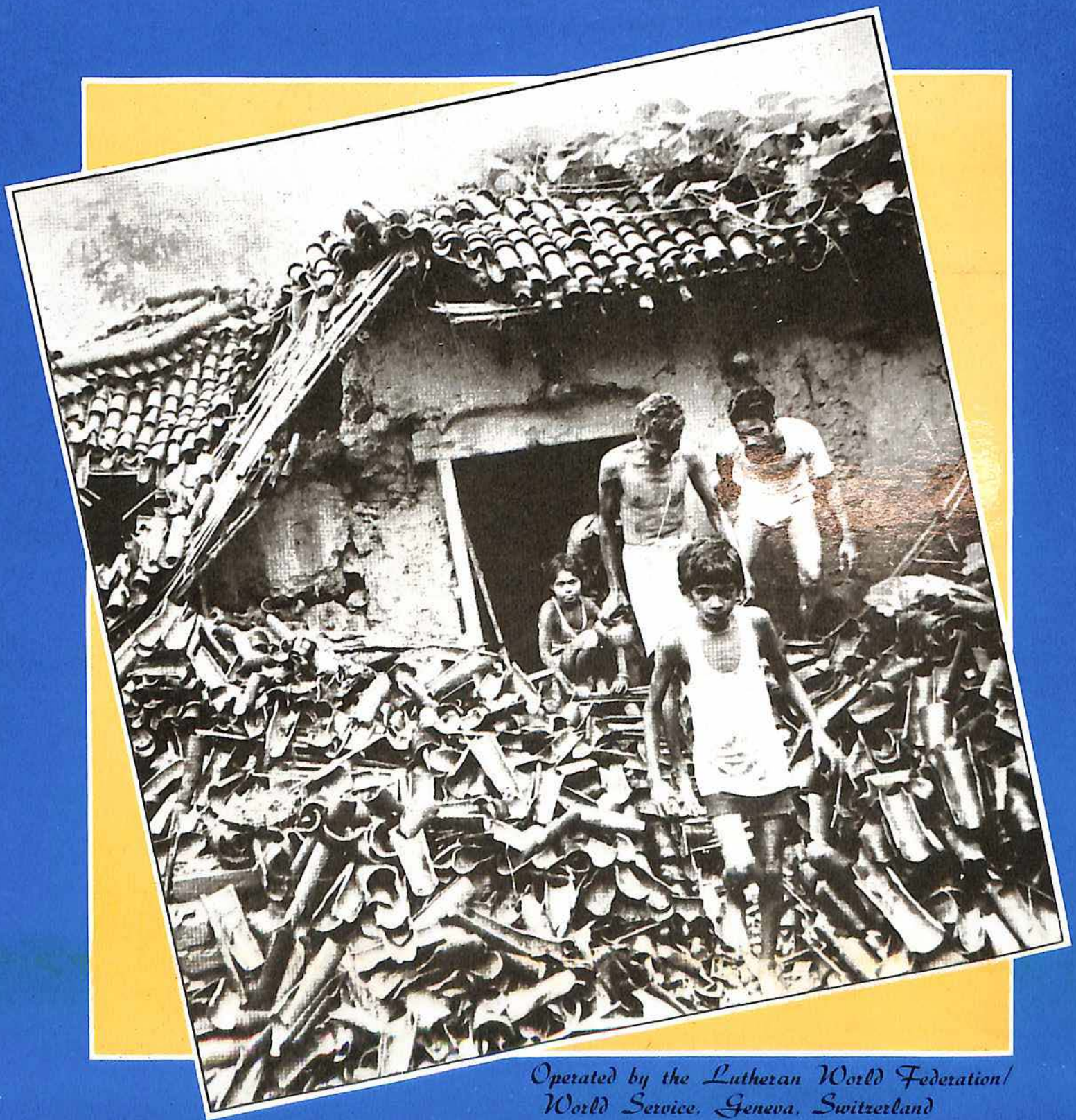
Auditors
Price Waterhouse.

Photo credits : Mr. K. G. Mathaikutty, Mr. S. K. Ganguly, Mr. A. K. Biswas, Mr. K. Sengupta, Mr. S. R. Das, The Statesman

MAP OF INDIA

SHOWING AREAS OF E & R UNIT
EMERGENCY AND REHABILITATION
OPERATION
1988





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